

SEREBORENNIKOV, N.N.; GEL'D, P.V.

Heat content and heat capacity of titanium at high temperatures.  
Izv. vys. ucheb. zav.; tsvet. met. 4 no.4:80-86 '61. (MIRA 14:8)

1. Ural'skiy politekhnicheskiy institut, kafedra fiziki.  
(Titanium--Thermal properties)  
(Metals at high temperature)

S/196/62/000/001/005/013  
E194/E155

AUTHORS: Sukhanov, Ye. L., and Serebrennikov, N. N.

TITLE: The heat content and specific heat of nichrome and carbon- and alloy-steels

PERIODICAL: Referativnyy zhurnal, Elektrotehnika i energetika, no. 1, 1962, 6, abstract 1B 36. (Tr. Ural'skogo politekhn. in-ta, 114, 1961, 81-85)

TEXT: A study was made of the thermal properties of the alloys shown in the table. The true specific heat of steel 10 increases smoothly up to a temperature of 700 °C; at temperatures above 900 °C it is 0.155 cal/g.degree and does not alter on further increasing the temperature. The specific heat curve of steel 2X13 (2Kh13) displays two sharp peaks; at temperatures above 900 °C the specific heat is 0.157 cal/g.degree and remains constant. No appreciable change was observed in the specific heat of specimens of this steel when they were heated and cooled. Comparison of the results indicates that thermal effects of the magnetic transformations of steel 10 and 2Kh13 are about the same. The true specific heat of nichrome changes smoothly, and this

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The heat content and specific heat... S/196/62/000/001/005/013  
E194/E155

confirms the absence of transformations associated with heating and  
cooling this alloy on changing the temperature from 0 to 1200 °C.  
4 literature references.

[Abstractor's note: Complete translation.]

Table

Alloy	Analysis, % (remainder Fe)							
	C	Si	Mn	Cr	Ni	Ti	S	P
Carbon steel 10	0.12	0.02	0.47	-	0.24	-	0.009	0.002
Nickel stainless steel 2Kh13	0.18	0.35	0.28	13.57	0.24	0.004	0.013	0.023
Nichrome X20N80 (Kh20N80)	0.14	0.29	0.70	21.60	76.33	-	0.012	0.016

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36825  
S/137/62/000/004/133/201  
A060/A101

18.8100

AUTHORS: Serebrennikov, N. N., Krentsis, R. P., Gel'd, P. V.

TITLE: Apparatus for determining the heat capacity of solid and molten alloys and steels

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 4, 1962, 87-88, abstract 41528 (v sb. "Fiz.-khim. osnovy proiz-va stali". Moscow, AN SSSR, 1961, 287-292)

TEXT: The description is given of the mechanism of a vacuum adiabatic calorimeter for determining the heat capacity of solid and molten alloys and steels. The main parts of the installation are the calorimeter itself, the furnace for heating the specimens, and the electric measurement circuit. The heating of the specimen up the required temperature is realized in the furnace fixed above the calorimeter. The heater, made of stainless steel or Mo-sheet is attached by clamp rings to mutually isolated flanges serving as the current leads. The length of the heater is about 280 mm, the diameter is about 30 mm. The specimen or a crucible with the specimen is suspended on a thin Mo- or W-wire from the Mo electrodes fixed in a magnesite plug. To the electrodes are

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Apparatus for determining the heat ...

connected contact springs which are pressed against the flanges connected to the autotransformer; at the required instant the circuit is closed; the wire is burned through and the specimen falls into the calorimeter. The temperature of the specimen is measured by a Pt/Pt - Rh thermocouple. The hermetic closure of the installation is ensured by rubber seals. The exhaustion of air in the system is carried out by low-vacuum (BH-461 [VN-461]) and high-vacuum (H-5 [N-5]) pumps. The methods of calibrating and checking the calorimeter are set forth. Data are cited relative to the course of temperature variation of the heat content of steel grades 34572 and 18XHBA (EI572 and 18KhNVA). There are 7 references.

Z. Fridman

[Abstracter's note: Complete translation]

Card 2/2

S/263/62/000/012/004/005

AUTHOR: Serebrennikov, N. N., Krentsis, R. P. and Gel'd, P. V. I007/I207

TITLE: Device for determining heat content (enthalpy) of solid and liquid alloys or steels

PERIODICAL: Referativnyy zhurnal, otdel'nyy vypusk. 32. Izmeritel'naya tekhnika, no. 12, 1962, 44, abstract 32.12.424 In collection "Fiz.-khim. osnovy proviz-va stali" M., AN SSSR, 1961, 287-292

TEXT: A vacuum-type adiabatic calorimeter is described for determining the thermophysical parameters of various metals and alloys. The device comprises a calorimeter, furnace for heating test specimens, and electric measuring instruments. The device, working on the mixing principle, permits measurements up to 1500–1700°C, the study of the temperature dependence of enthalpy and specific heat of steel in the range from ambient to melting temperatures, and determination of the heat of melting (fusion). The method of calibration and checking of the device is outlined. Results are reported on investigations of the temperature dependence of enthalpy for ЭИ572 (EI572) and 18XHBA (18 KhNVA) steel grades. The course of the temperature dependence was found to be different for the steel grades investigated. Large inclusions of carbon and alloying elements markedly decrease the initial melting point (1375°C for EI572 steel and 1485°C for 18KhNVA and widen the range of the melting temperature (by 125°C and 40°C for the EI572 and 18KhNVA steel grades respectively). The melting heat was found to be 57 cal/g and 60 cal/g for the investigated steel grades. There are 4 figures and 7 references.



[Abstracter's note: Complete translation.]

Card 1/1

LETUN, S.M.; GEL'D, P.V.; SEREBRENNIKOV, N.N.

Thermodynamic characteristics of manganese monosilicide. Izv.vys.  
ucheb.zav.; chern. met. 8 no.4:5-12 '65.

(MIRA 18:4)

1. Ural'skiy politekhnicheskiy institut.

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001548010016-5

DERIN, S.M.; SEL'DYEV, P.V.; SERGEEVICH, N.N.

Thermodynamic characteristics of manganese silicides. Zhur.  
neorg. khim. 10 no. 5 cl263-1264 May '65. (MIRA 18:6)

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001548010016-5"

LETUN, S.M. (Sverdlovsk); GEL'D, P.V. (Sverdlovsk); SEREDPENITKOV, N.N.  
(Sverdlovsk)

Thermochemistry of Mn<sub>3</sub>Si. Izv. AN SSSR. Met. no.6:137-147 N.D. '65.  
(MTEA 19:1)

1. Submitted July 13, 1964.

SEREBORENNIKOV, N.V.

112-3-5874

Translation from: Referativnyy Zhurnal, Elektrotehnika, 1957, Nr 3,  
pp. 117 (USSR)

AUTHOR: Serebrennikov, N.V.

TITLE: A Two-Stage Push Button (Knopka dvukhstupenchatogo  
vklyucheniya)

PERIODICAL: Sb. rats. predlozheniy. M-vo elektrotekhn. prom-sti  
SSSR, 1955, Nr 56, pp. 27-28

ABSTRACT: Bibliographic entry.

ASSOCIATION: Ministry of Electrical Industry of the USSR (M-vo  
elektrotekhn. prom-sti SSSR)

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SOV/28-59-3-8/25

25(5)

AUTHOR: Serebrennikov, N.V., Engineer  
TITLE: At the Plant "Mosrentgen" (Na Zavode "Mosrentgen")  
PERIODICAL: Standartizatsiya, 1959, Nr 3, pp 31 - 32 (USSR)  
ABSTRACT: Information is given on the work done by the plant's Bureau of Normalization and Standardization ("BNS") organized in 1957. The staff are designers who were moved from the plant's Designing Bureau. There were great difficulties in the beginning because of lack of guidance from higher organizations. The work started with sorting all equipment components into groups of similar application, then grouping identical elements of these components. Examples of the "unification" already completed are described: terminal panels, transformer coils (Figure 1), yokes for wire resistances (Figure 2) which were of four different types before the "unification", all not completely satisfactory. The technical documents for the yokes were reduced by 60 sheets, the quan-

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At the Plant "Mosrentgen"

tity of technological charts was cut correspondingly. Also "unified" are contact groups (Figure 4) for automatic control and signalization; the large number of such has been reduced to only two types of contact plates and insulators. This set of parts is sufficient to assemble contact groups of open and closed kinds, and the new design permits assembling with pre-tension, which makes the contacts more dependable in operation and eliminates their vibration. There is no technical literature on standardization and normalization, and this hampers the work. The author stresses the need of such a manual with clearly outlined examples of standardization work in various industry branches. There are 3 diagrams.

Card 2/2

KUZNETSOV, S.I.; SEREBRENNIKOV, O.V.; DEREVYANKIN, V.A.; VOLKOVA, P.I.;  
PAVLOV, F.N.; YEVTYUTOV, A.A.; CHEMODANOV, V.S.; STOLYAR, B.A.;  
KONOVALOV, I.V.; LIVER, V.B.; MIYCHENKO, V.S.; SMIRNOV, B.A.

"Production of alumina" by A.I. Lainer. Reviewed by S.I.  
Kuznetsov and others. TSvet. met. 34 no.11:85-86 N '61.  
(MIRA 14:11)

1. Ural'skiy politekhnicheskiy institut (for Kuznetsov,  
Serebrenikov, Derevyankin). 2. Ural'skiy filial AN SSSR  
(for Volkova, Pavlov). 3. Ural'skiy alyuminiyevyy zavod (for  
Yevtyutov, Chemodanov, Stolyar). 4. Bogoslovskiy alyuminiyevyy  
zavod (for Konovalov, Liver, Miychenko). 5. Sverdlovskiy  
Sovnarkhez (for Smirnov).

(Alumina)  
(Lainer, A.I.)

SEREBRENNIKOV, P.

Cosmetics

Scientific foundation for the cosmetics industry. Rabotnitsa 30, No. 1, 1952.

Monthly List of Russian Accessions, Library of Congress, March 1952. Unclassified.

SEREBRENNIKOV, P.

Reducing industrial use of foodstuffs in the sixth five-year  
plan. Vop. ekon. no.10:24-35 O '56. (MLRA 9:11)

(Oils and fats) (Synthetic products) (Alcohol)

SEREBRENNIKOV, P.

State deliveries and the reorganization of livestock production.  
(MIRA 11:11)  
Vop.ekon. no.10:71-80 O '58.  
(Stock and stockbreeding)

SEREBOENNIKOV, P.D.

A new plant. Masl.-zhir.prom. 20 no.3:20-23 '55. (MIZA 8:7)

1. Gosudarstvennaya planovaya komissiya SSSR  
(Hydrocarbons) (Acids, Fatty)

30437

S/109/61/006/012/012/020  
D246/D305

9,4330 (1139, 1143, 1161)

AUTHORS: Bonch-Bruyevich, V.L., and Serebrennikov, P.S.

TITLE: On the volt-amp characteristics of tunnel diodes

PERIODICAL: Radiotekhnika i elektronika, v. 6, no. 12, 1961,  
2041 - 2053

TEXT: Calculations of the volt-amp characteristics are made, assuming complete degeneracy (zero temperature) and with particular attention given to the inhomogeneity of electric field in the junction. Direct transitions and indirect transitions with participation of phonons and impurities are, treated. The negative resistance region is investigated in the first and last cases. The present work was carried out because the authors considered that a satisfactory theoretical treatment had not been carried out previously by themselves and others. In the introduction the following complications are discussed: the narrowness of the p-n junction, the abrupt inhomogeneity of the electric field, localized fluctuations of the field, the energy spectra of heavily doped regions and the

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S/109/61/006/012/012/u20  
D246/D305

On the volt-amp characteristics of ...

occurrence of permitted levels in the forbidden gap. The treatment for the inhomogeneous field consists in dividing the junction into sections, sufficiently small for the field in each to be homogeneous, but sufficiently large for the linear dimensions to exceed the lattice constant. The usual theory of tunnel effect is applied to each section and the resultant current is obtained by integration over all sections. The field distribution assumed is  $E = E_m \{1 - (x/l_1)^\gamma\}$  for  $0 \leq x \leq l_1$  and  $E = E_m \{1 - (x/-l_2)^\gamma\}$  for  $-l_2 \leq x \leq 0$  where  $x$  is the coordinate direction perpendicular to the junction and  $l = l_1 + l_2$  is the length of the junction;

$$E_m = E_{m,0} (1 - \varphi/U_k)^{\frac{\gamma}{\gamma+1}},$$

where  $E_{m,0}$  and  $\gamma (\geq 0)$  are parameters estimated from the dependence of the junction capacitance upon applied voltage  $\varphi$ , and  $U_k$  is the contact potential difference between n- and p-type material.

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S/109/61/006/012/012/020

D246/D305

On the volt-amp characteristics of ...

Direct transitions (with assumptions applicable to germanium): The calculation was carried out for the isotropic approximation of scalar effective masses of electrons  $m_n$  and holes  $m_p$  and with the

assumption  $\Delta_p > \Delta_n$ , where  $\Delta_p$  and  $\Delta_n$  are the energy differences between the Fermi level and the bottom of the conduction band and the top of the valence band, respectively. In conclusion, attention is drawn to the similarity of the formulas obtained for the three different mechanisms of transition, to the validity of the formal procedure of calculations based on homogeneous field theory, assuming everywhere  $\gamma \rightarrow \infty$ , and to the paramount importance of alloying conditions in determining  $\Delta_n$  and  $\Delta_p$  upon which all calculated quantities and functional relations depend.

Acknowledgement is made to S.G. Kalashnikov for discussion and to M. Leks for a pre-print of this work. There are 1 figure and 13 references: 7 Soviet-bloc and 6 non-Soviet-bloc. The 4 most recent references to the English-language publications read as follows: R.C. Klauder, Phys. Rev. (in print), E.O. Kane, J. Appl. Phys., 1961, 32, 1, 83; Nick Holonyak, jr., J. Appl. Phys., 1961, 32, 2, 130; E.O. Kane, Phys. Card 3/4

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On the volt-amp characteristics of ...

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S/109/61/006/012/012/020  
D246/D305

chem. Sol., 1960, 12, 2, 181.

SUBMITTED: July 11, 1961

4

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S/109/62/007/003/022/029  
D256/D302

4,4330 (1139,1143,1160,1161)

AUTHOR: Serebrennikov, P.S.

TITLE: Tunnel effect with scattering by impurities

PERIODICAL: Radiotekhnika i elektronika, v. 7, no. 3, 1962,  
536 - 541

TEXT: It is not always possible to explain the experimentally determined properties of tunnel diodes by assuming that the scattering on phonons is alone responsible for the leakage of electrons from band to band, bearing out that the elastic interactions should also be taken into account. The scattering of electrons by the charged impurity present in both p- and n-regions is considered to be the most probable elastic interaction. An attempt is made by the author to explain the effect of these elastic interactions: A formula is derived expressing the number of electrons that leaked from the valence band into the conductivity band in an uniform electric field in the presence of scattering by the impurity, the effect of the impurity on the energy spectrum of the carriers being

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Tunnel effect with scattering by ...

S/109/62/007/003/022/029

D256/D502

neglected. Calculation is carried out in momentum representation using Bloch functions, following the approach of E.O. Kane, for a cubic lattice, but the result is nevertheless general since it can be shown that the number of electrons that leaked does not depend on the choice of the crystal symmetry. The derived leakage of electrons due to scattering on impurity is compared with that resulting from the interactions with phonons, showing that the contribution from the latter mechanism is more substantial. However, both contributions are of the same order of magnitude. V.L. Bonch-Bruyevich is mentioned for the interest shown in this investigation, and helpful suggestions by L.V. Keldysh are acknowledged. There are 5 references: 2 Soviet-bloc and 3 non-Soviet-bloc. The references to the English-language publications read as follows: N. Holonyak, Jr. et. al., Phys. Rev. Letters, 1959, 3, 4, 167; E.O. Kane, J. Phys. Chem. Solids, 1960, 12, 2, 181; E.O. Kane, J. Appl. Phys., 1961, 32, 1, 83.

ASSOCIATION: Institut radiotekhniki i elektroniki AN SSSR (Institute of Radio Engineering and Electronics of the AS USSR)

SUBMITTED: July 11, 1961  
Card 2/2

L 10245-63

EWT(1)/BDS--AFFTC/ASD

ACCESSION NR: AP3000998

S/0109/63/008/006/1002/1008

51

AUTHOR: Bonch-Bruyevich, V. L.; Serebrennikov, P. S.TITLE: Current-voltage characteristic of tunnel diode.<sup>25</sup> Case of arbitrary temperatures

SOURCE: Radiotekhnika i elektronika, v. 8, no. 6, 1963, 1002-1008

TOPIC TAGS: tunnel diode theory

ABSTRACT: Formulas are developed that describe the current-voltage characteristic of a tunnel diode and allow for a nonuniform field in the junction. The tunnel current associated with indirect junctions is considered; the formulas describe the simplest case when electrons are scattered by charged impurities. Extremum points and negative resistance are analyzed for various impurity-content cases. Orig. art. has: 1 figure and 31 formulas.

ASSOCIATION: none

SUBMITTED: 07Jun62

DATE ACQD: 01Jul63

ENCL: 00

SUB CODE: 00

NO REF Sov: 003

OTHER: 000

Card 1/1<sup>rh/dk</sup>

BONCH-BRUYEVICH, V.L.; SEREBRENNIKOV, P.S.

Voltampere characteristic of a tunnel diode (at arbitrary temperatures).  
Radiotekh. i elektron. 8 no.6:1002-1008 Je '63. (MIRA 16:7)  
(Tunnel diodes)

ACCESSION NR: AP4038619

S/0109/64/009/004/0676/0680

AUTHOR: Kovalev, A. N.; Serebrennikov, P. S.

TITLE: Numerical calculation and experimental verification of the current-voltage characteristic of a germanium tunnel diode

SOURCE: Radiotekhnika i elektronika, v. 9, no. 4, 1964, 676-680

TOPIC TAGS: semiconductor, semiconductor diode, germanium diode, tunnel diode, current voltage characteristic

ABSTRACT: V. L. Bonch-Bruyevich's general formula for the current-voltage characteristic (Rad. i elektronika, 1963, 8, 6, 1002) allows for the field non-uniformity in a narrow p-n junction and is suitable for any temperature and any degree of alloying. In the present article, the formula is used for a numerical calculation of the current-voltage characteristic of a Ge tunnel diode. A comparison with experimental data obtained earlier by the authors (Rad. i elektronika,

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ACCESSION NR: AP4038619

1963, 8, 6, 1009) reveals that the best agreement occurs in the cases when, for the n-region, a value of  $\Delta_n$  is selected close to  $\Delta_p$  and is somewhat higher than that determined on the Hall effect basis;  $\Delta_n$  is the difference between the Fermi level and the bottom of the conductivity zone in the n-region;  $\Delta_p$  is the difference between the top of the valence zone in the p-region and the Fermi level. "The authors are thankful to N. P. Rumyantseva for her assistance in carrying out the numerical calculation. In conclusion, we wish to thank V. L. Bonch-Bruyevich for his valuable comments." Orig. art. has: 2 figures, 2 formulas, and 1 table.

ASSOCIATION: Institut radiotekhniki i elektroniki AN SSSR (Institute of Radio Engineering and Electronics, AN SSSR)

SUBMITTED: 13Mar63 DATE ACQ: 05Jun64 ENCL: 00

SUB CODE: EC NO REF SOV: 004 OTHER: 003

Card 2/2

KOTYAKHOV, F.I.; SEREBRENNIKOV, S.A.

Estimating the distribution of fractures in oil and gas reservoir  
rocks using deep photography. Geol. nefti i gaza 8 no.11:26-  
30 N '64. (MIRA 17:12)

1. Vsesoyuznyy neftegazovyy nauchno-issledovatel'skiy institut.

PIRVERDYAN, A.M., doktor tekhn.nauk; TROFIMUK, A.A.; EFROS, D.A., kand.-tekhn.nauk; SEREBRENNIKOV, S.A.

Report on the conference on methods held in the All-Union Petroleum Research Institute. Nauch.-tekhn. sbor. po dob. nefti no.1:75-82 '58. (MIRA 15:9)

1. Azerbaydzhanskiy nauchno-issledovatel'skiy institut po dobache nefti (for Pirverdyan).
2. Chlen-korrespondent AN SSSR; laboratoriya podscheta zapasov Vsesoyuznogo neftegazovogo nauchno-issledovatel'skogo instituta (for Trofimuk).
3. Laboratoriya podzemnoy gidrodinamiki Vsesoyuznogo neftegazovogo nauchno-issledovatel'skogo instituta (for Efros).  
(Petroleum research)

KOTYAKHOV, F.I.; MEL'NIKOVA, Yu.S.; SEREBRENNIKOV, S.A.

Method for calculating recovery factors in water flood  
operations. Trudy VNII no.24:37-63 '59. (MIRA 13:5)  
(Oil field flooding)

KOTYAKHOV, F.I.; SEREBRENNIKOV, S.A.; SHCHERBAKOVA, T.V.

Using deep photography of the walls of wells to determine the  
physical parameters of fractured reservoirs. Neft. khoz. 39  
no.5:40-45 My '61. (MIRA 14:9)  
(Oil reservoir engineering)

VAYNTRAUB, I.M., inzh.; GOBZA, R.N., inzh.; KATSNEL'SON, G.A., inzh.; KRASILOV, G.I., inzh.; ORENTLIKHER, P.B., inzh.; ERLIKHMAN, S.Ya., inzh.; VOLNYANSKIY, A.K., glav. red.; SOKOLOV, D.V., zam. glav.red.; TARAN, V.D., red.; SEREBRENNIKOV, S.N., red.; MIKHAYLOV, K.A., red.; STAROVEROV, I.G., red.; VOLODIN, V.Ye., red.; NIKOLAYEVSKIY, Ye.Ya., red.; SMIRNOV, L.I., inzh., nauchnyy red.; SKVORTSOVA, I.P., red. izd-va; SHERSTNEVA, N.V., tekhn. red.

[Adjusting, control, and operation of industrial ventilation systems] Naladka, regulirovka i ekspluatatsiya sistem promyshlennoi ventiliatsii. Pod red. S.IA.Erlikhmana. Moskva, Gosstroizdat, 1962. 555 p. (MIRA 15:9)

1. Russia (1917- R.S.F.S.R.) Glavnoye upravleniye sanitarno-tehnicheskogo montazha.  
(Factories—Heating and ventilation)

SEREBRENNIKOV, S. S.

35265. Stroitel'stvo zhelezobetonnykh promyshlennykh dymovykh Trub.  
Trudy IV vsesoyuz. Konf-tsii po beton i zhetezobeton. Konstruktsiyam.  
GKh. I.M.-L., 1949, S. 302-11

SO: Letopis' Zhurnal'nykh Statey Vol. 34, 1949 Moskva

SEREBRENNIKOV, S.S.

[Construction of reinforced concrete chimneys] Stroitel'stvo  
zhelezobetonnykh dymovykh trub. Moskva, Gos. izd-vo lit-ry po  
stroitel'stvu i arkhitekture, 1953. 133 p. (MLRA 7:6)  
(Chimneys) (Reinforced concrete construction)

BELYAVSKIY, G.N.; RYBIN, P.I.; SEREBRENNIKOV, S.S., redaktor; BEKKER,  
O.G., tekhnicheskiy redaktor

[Lining steel smelting furnaces] Kladka staleplavil'nykh pechей.  
Izd. 2-e, ispr. i dop. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry  
po chernoi i tsvetnoi metallurgii, 1953. 322 p. (MIRA 7:10)  
(Smelting furnaces)

1. VOLYNSTEV, V. A. , SOL'DENKOV, L. D. ; SEREBRENIKOV, S. S.
2. USSR (600)
4. Concrete Construction - Formwork
7. Experience in building silo--type structures with interchangeable standard metal forms, Stroi. prom. 31 No. 3, 1953.
9. Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

GORA, A.P.; ZIL'BERMAN, A.A.; KULINOK, Ye.A.; MATVEICHEV, A.S.; SEREBRENNIKOV, S.S., redaktor; NEPOMNYASHCHIY, N.V., redaktor; MIKHAYLOVA, V.V., tekhnicheskiy redaktor.

[Rapid repair of Martin furnaces] Skorostnye remonty martenovskikh pechei. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1954. 335 p.  
(Blast furnaces--Repairing) (MLRA 7:11)

DENISENKO, Ivan Markovich; KAPUSTIN, Kirill Yeremeyevich; MAKSIMOV, Pavel  
Georgiyevich; SEREBRENNIKOV, S.S., redaktor; NEPOMNYASHCHIY, N.V.,  
redaktor izdatel'stva; ATRACHEVICH, M.K., tekhnicheskiy redaktor

[Organization of repairs of open-hearth furnaces] Organizatsiya  
proizvodstva remontov martenovskikh pechei. Moskva, Gos. nauchno-  
tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1956. 446 p.  
(Open-hearth furnaces) (MLRA 9:7)

SEREBRENNIKOV, Sergey Sergeevich; ZIL'BERMAN, A.A., redaktor; YABLONSKAYA, L.V., redaktor izdatel'stva; PETROVA, N.S., tekhnicheskiy redaktor

[Refractory material for blast furnaces and their auxiliary installations] Ogneupornaia kladka domennykh pechey i ikh vspomogatel'nykh ustroistv. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1957. 326 p. (MIRA 10:3)  
(Blast-furnaces) (Refractory materials)

SEREBRENNIKOV, S.S.

KIZNETSOV, G.F., inzh.; LATASH, M.M., inzh.; MILOVANOV, inzh.;  
SEREBRENNIKOV, S.S., inzh.

Erecting tunnel kilns of heat proof precast reinforced concrete  
elements. Nov. tekhn. i pered. op. v stroi. 20 no.1:6-10 Ja '58.  
(MIRA 11:2)

(Kilns) (Precast concrete construction)

SEREBRENNIKOV, S.S., inzh.; TOLKACHEV, P.I., inzh.

Using large blocks in building chimneys and industrial furnaces.  
Nov. tekhn. i pered. op. v stroi. 20 no.2:6-11 F '58.

(MIRA 11:2)

(Chimneys) (Furnaces) (Concrete blocks)

VOLYNTSEV, V.A., inzh.; SEREBRENNIKOV, S.S., inzh.

Preventing corrosion of reinforced concrete chimneys. Nov. tekhn. i  
pered. op. v stroi. 20 no. 8:15-18 Ag '58. (MIRA 11:?)  
(Chimneys)  
(Corrosion and anticorrosives)

SEREBORENNIKOV, S.S., inzh.; TOLKACHEV, P.I.

Improving the technology of constructing industrial furnaces  
and chimneys. Nov.tekh.mont. i spets.rab. v stroi. 21 no.1:  
9-13 Ja '59. (MIRA 12:1)

1. Trest Soyuzteplostroy.  
(Furnaces) (Chimneys)

ALDATOV, T.N.; ANATOL'YEVSKIY, P.A.; ANOKHINA, K.T.; ORECHKIN, P.M.;  
PLOKHOV, V.I.; YAKOVLEV, A.I.; VOLNYANSKIY, A.K., glavnnyy red.;  
PLOTNIKOV, N.A., prof., doktor tekhn.nauk, zasluzhennyy deyatel'  
nauk RSFSR, red.; KAZ'MIN-BALASHOV, A.I., inzh., nauchnyy red.; SOKOLOV,  
D.V., red.; TARAN, V.D., red.; SEREBRENNIKOV, S.S., red.; MIKHAYLOV,  
K.A., red.; STAROVEROV, I.G., red.; VOLODIN, V.Ye., red.;  
NIKOLAYEVSKIY, Ye.Ya., red.; SHERSHUKOVA, M.A., red.izd-va;  
TEMKINA, Ye.L., tekhn.red.

[Manual for specialized work; design and construction of water-supply  
wells] Spravochnik po spetsial'nym rabotam; proektirovanie i sooruzhe-  
nie skvazhin dlia vodosnabzheniya. Pod obshchey red. N.A.Plotnikova.  
Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam,  
1960. 235 p. (MIRA 14:6)

1. Gosudarstvennyy institut po proektirovaniyu spetsial'nykh sooruz-  
heniy promyshlennogo stroitel'stva.  
(Wells)

AGURIN, A.P.; BORISOV, P.V., inzh.; VOLYNTSEV, inzh.; GOYKOLOV, Ye.F.,  
GROMAKOV, G.P.; SZEZBRZENNIKOV, S.S., inzh.; TOLKACHEV, P.I.,  
inzh.; TYULENEVA, L.M., red.izd-va; MEDVEDEV, I.Ya., tekhn.  
red.; EL'KINA, E.M., tekhn.red.

[Handbook on refractory linings of industrial furnaces] Spra-  
vochnik po ogneupornoj kladke promyshlennych pechesi. Moskva, Gos.  
izd-vo lit-ry po stroit., arkhit. i stroit.materialam, 1960.  
349 p.  
(MIRA 13:5)

1. SOYUZTEPLOSTROY, trust, Moscow. 2. Ordona Trudovogo Krasnogo  
Znameni trust Soyuztepstroy (for all except Tyuleneva, Medvedev,  
El'kina).  
(Furnaces) (Refractory materials)

KRYLOV, V.A.; SIMACHEV, L.V.; GURVITS, A.I., inzh., nauchnyy red.; VOLNYANSKIY, A.K., glavnnyy red.; SOKOLOV, D.V., zam.glavnogo red.; TARAN, V.D., red.; SEREBRENNIKOV, S.S., red.; MIKHAYLOV, K.A., red.; STAROVEROV, I.G., red.; VOLODIN, V.Ye., red.; NIKOLAYEVSKIY, Ye.Ya., red.; GORDEYEV, P.A., red.izd-va; UDOD, V.Ya., red.izd-va; EL'KINA, E.M., tekhn.red.

[Reference book on special work; mechanical assembly work in industrial construction] Spravochnik po spetsial'nym rabotam; mekhanomontazhnye raboty v promyshlennom stroitel'stve. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam, 1960. 498 p. (MIRA 14:4)

(Machine-shop practice)

STAROVEROV, I.G., inzh., red.; PISKORSKIY, B.N., red. spravochnika; VOINYANSKIY, A.K., glav. red.; SOKOLOV, D.V., zam. glav. red.; TARAN, V.D., red.; SEREBRENNIKOV, S.S., red.; MIKHAYLOV, K.A., red.; VOLODIN, V.Ye., red. NIKOLAYEVSKIY, Ye.Ya., red.; NINEMYAGI, D.K., red. izd-va; OSENKO, L.M., tekhn. red.

[Assembly of ventilation systems] Montazh ventiliatsionnykh sistem. Pod obshchey red. I.G. Staroverova. Moskva, Gos. izd-vo lit-ry po stroit. i stroit. materialam, 1961. 430 p. (MIRA 14:10)

1. Moscow. Gosudarstvennyy proyektnyy institut Santekhproyekt.  
(Ventilation)

KAMENETSKIY, S.P.; UTKIN, V.V.; ZOTOV, A.V., nauchnyy red.; VOLNYANSKIY, A.G.,  
glav. red.; SOKOLOV, D.V., zam. glav. red.; TARAN, V.D., red.; SERE-  
BRENNIKOV, S.S., red.; MIKHAYLOV, K.A., red.; STAROVEROV, I.G., red.;  
VOLODIN, V.Ye., red.; NIKOLAEVSKIY, Ye.Ya., red.; SHIROKOVA, G.M.,  
red. izd-va; NAUMOVA, G.D., tekhn. red.

[Heat insulation work] Teploizoliatsionnye raboty. Moskva, Gos. izd-  
vo lit-ry po stroit., arkhit. i stroit. materialam, 1961. 439 p.  
(MIRA 14:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut "Teploproyekt".  
(Insulation (Heat))

AGURIN, Aleksandr Petrovich; GOYKOLOV, Yevgeniy Fedorovich; GROMAKOV,  
Gavriil Petrovich; ZNOVNIKOVSKIY, Nikolay Valentinovich;  
MOSEYEMKOV, Andrey Abramovich; SREBRENICKOV, S.S., nauchnyy  
red.; RYAZANTSEVA, L.I., red. izd-va; NAUMOVA, G.D., tekhn.  
red.

[Safety measures in the construction and repair of industrial  
furnaces]Tekhnika bezopasnosti na stroitel'stve i remonte  
promyshlennykh pechei. [By]A.P. Agurin i dr. Moskva, Gosstroj-  
izdat, 1962. 187 p. (MIRA 15:8)  
(Furnaces--Construction) (Industrial safety)

AKULOV, I.A., kand. tekhn.nauk,dots.; ALEKSEYEV, Ye.K., inzh.; GURARI, M.D., inzh.[deceased]; DMITRIYEV, I.S., kand.tekhn.nauk,dots.; YEVSEYEV, R.Ye., inzh.; ZIL'BERBERG, A.L., inzh.; LIVSHITS, L.S., kand.tekhn.nauk; MEL'NIK, V.I., inzh.; RAZUMOVA, E.D., inzh.; TARAN, V.D., prof., doktor tekhn.nauk; FAL'KEVICH, A.S., kand.tekhn. nauk; TSEGEL'SKIY, V.L., inzh.; CHERNYAK, V.S., inzh.; SHILOVTSEV, D.P., inzh.; ZVEGINTSEVA, K.V., inzh., nauchnyy red.; TYURIN, V.F., inzh.,nauchnyy red.; VOLNYANSKIY,A.K.,glav.red.; SOKOLOV,D.V.,zam. glav.red.; SEREBRENNIKOV,S.S., red.; MIKHAYLOV,K.A.,red.; STAROVEROV, I.G., red.; VOLODIN, V.Ye., red.; NIKOLAEVSKIY, Ye.Ya.,red.; LYTKINA,L.S.,red.izd.-va; PEREVALYUK,M.V.,red. izd.-va; RUDAKOVA, N.I., tekhn. red.

[Welding operations in building]Svarochnye raboty v stroitel'stve. Mo-skva,Gosstroizdat,1962. 783 p. (MIRA 15:6)  
(Welding--Handbooks, manuals, etc.) (Building)

BORISOV, Pavel Vasil'yevich; GOYKOLOV, Yevgeniy Fedorovich; GROMAKOV,  
Gavriil Petrovich; SEREBRENNIKOV, S.S., nauchnyy red.;  
VDOVENKO, Z.I., red. izd-va; KOROBKOVA, N.I., tekhn. red.;  
TARAKHOVA, K.Ye., tekhn. red.

[Construction of open-hearth furnaces] Klakda martenovskikh pe-  
chei. Moskva, Gosstroizdat, 1962. 158 p. (MIRA 15:12)  
(Open-hearth furnaces)

SEREBRENNIKOV, S.S., inzh.

Experience with refractory work on blast furnaces. Mont.  
i spets. rab. v stroi, 24 no.6:17-21 Je '62. (MIRA 15:6)

1. Vsesoyuznyy proyektno-montazhnyy stroitel'nyy trest ognevoy  
teplotekhniki.

(Blast furnaces)  
(Refractory materials)

SEREБRENIKOV, S.S.

Effect of strong pain stimuli on intestinal secretion in experimental hypoxia. Sbor. nauch. trud. Ivan. gos. med. inst. no.25:29-34 '62.  
(MIRA 17:5)

1. Iz kafedry normal'noy fiziologii (zav. - prof. S.S. Serebrenikov)  
Ivanovskogo gosudarstvennogo meditsinskogo instituta (rektor -  
dotsent Ya.M. Romanov).

KOROLEVA, N.A., kard.med.nauk; POLTYREV, S.S., nauchnyy konsul'tant, prof.;  
SEREBRENIKOV, S.S., nauchnyy konsul'tant, prof.

Afferent influences on some indicators of metabolic processes  
in experimental peritonitis. Sbor. nauch. trud. Ivan. gos. med.  
inst. no.27:138-142'62. (MIRA 16:8)

1. Iz kafedry normal'noy fiziologii (zav. - prof. S.S.  
Serebrenikov) Ivanovskogo gosudarstvennogo meditsinskogo in-  
stituta (rektor - dotsent Ya. M. Romanov).  
(PERITONITIS) (METABOLISM, DISORDERS OF)

AGURIN, A.P.; GOYKOLOV, Ye.F.; GROMAKOV, G.P.; ZHOVNIROVSKIY, N.V.;  
MOSEYENKOV, A.A.; SEREBRENNIKOV, S.S., nauchn. red.

[Instructions on safety measures in the construction and  
repair of industrial furnaces and smokestacks] Inst<sup>r</sup>uktiv-  
nye ukazaniia po tekhnike bezopasnosti pri stroitel'stve i  
remonte promyshlennyykh pechei i trub. Moskva, Stroiizdat,  
1964. 126 p. (MIRA 17:6)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye teplotekh-  
nicheskikh i termoizoliatsionnykh rabot. 2. Inzhenerno-  
tekhnicheskiye rabotniki tresta "Soyuzteplostroy" (for all  
except Serebrennikov).

VESELOV, A.A., inzh.; KARNEYEV, N.A., inzh.; KOZLOVSKIY, L.I.,  
inzh.; STEPANOV, A.I., inzh.; TUSHNYAKOV, M.D., inzh.;  
SHCHEPET'YEV, A.I., inzh.; VOLNYANSKIY, A.K., glav. red.;  
SUDAKOV, G.G., zam. glav. red.; TARAN, V.D., red.;  
SEREBRENNIKOV, S.S., red.; MIKHAYLOV, K.A., red.; STAROVEROV,  
I.G., red.; VOLODIN, V.Ye., red.; NIKOLAYEVSKIY, Ye.Ya., red.

[Hoisting and conveying equipment for assembly and specialized  
operations] Pod"emno-transportnoe oborudovanie dlia montazh-  
nykh i spetsial'nykh rabot. Izd.2., dop. Moskva, Stroiizdat,  
1964. 679 p.  
(MIRA 18:4)

ALEKSEYEV, A.G.; BAYUSHKIN, S.N.; MARKELOV, V.V.; NEBESNYY, A.D.; SOKOLOV, D.V., inzh., red.; VOLNYANSKIY, A.K., glav. red.; TARAN, V.D., red.; SEREBRENNIKOV, S.S., red.; MIKHAYLOV, K.A., red.; STAROVEROV, I.G., red.; VOLODIN, V.Ye., red.; NIKOLAYEVSKIY, Ye.Ya., red.; CHEKHOVSKAYA, T.P., red. izd-va; BOROVNEV, N.K., tekhn. red.

[Concise manual on electric wiring operations] Kratkiy spravochnik proizvodstvija elektromontazhnykh rabot. Pod red. D.V. Sokolova. Moskva, Gos. izd-vo lit-ry po stroit., arkhit. i stroit. materialam, 1961. 311 p. (MIRA 14:10)

l. Moscow. Gosudarstvennyy proyektnyy institut Tyazhpromelektroproyekt.

(Electric wiring--Handbooks, manuals, etc.)

SEREBRENNIKOV, S. V.

(1)

12092\* (Fertilizing Seeds of Cereal Crops.) *Udobrenie  
semian zernovykh kul'tur. S. V. Serебренников. Doslizenija  
Nauki i Perc 'ovogo Opyta v Sel'skom Khoziaistve*, 1954, no. 4,  
Apr., p. 71-72.  
Tests of superphosphates, KCl and KNO<sub>3</sub> on wheat, barley,  
oats, millet, and buckwheat before planting.

ACC NR: AR6035135

SOURCE CODE: UR/0275/66/000/009/V019/V019

AUTHOR: Serebrennikov, V. A.; Razzhivin, B. P.

TITLE: Delay lines with a wire acoustical line

SOURCE: Ref. zh. Elektronika i yeye primeneniye, Abs. 9V137

REF SOURCE: Tr. Leningr. in-t aviats. priborostr., vyp. 45, 1965, 33-37

TOPIC TAGS: circuit delay line, propagation velocity, longitudinal wave, acoustic line, delay line

ABSTRACT: The problems of designing ultrasonic dispersion delay lines, in particular wire delay lines are examined. The expediency of using longitudinal waves of the first order of magnitude is indicated, for which it is possible to obtain a considerable linear region of dependence of the delay on frequency. The following equations are derived for calculating the diameter d and the delay line L:

$$d = \frac{(x_1 - x_2) v_0}{\Delta f}$$

UDC: 621.374.55-8

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ACC NR: AR6035135

where  $x_1 = \frac{df_1}{v_0}$ ,  $x_2 = \frac{df_2}{v_0}$  and  $f_1, f_2$  are the cutoff frequencies;  $v_0$  is the propagation velocity in the delay line; and

$$L = \frac{\frac{S}{\Delta f} v_0}{\frac{u_2}{u_1} - \frac{u_0}{u_1}}$$

where  $u_1$  is the group velocity of the longitudinal waves at frequency  $f_1$ ;  $u_2$  is the group velocity of the longitudinal waves at frequency  $f_2$ ;  $S$  is the steepness of the linear sector of the dispersion curve C. Recommendations are made for selecting materials and designs of the delay lines u and the experimental data are presented. A bibliography of 2 titles is included. [Translation of abstract] [NT]

SUB CODE: 20/

Card 2/2

SEREBRENNIKOV V.N.

U.S.S.R.

621,311,153

2106. Determination of data for the load dispatcher's selection of the order of loading turbogenerator sets. V. N. Serebrennikov. Elekt. Stantsii, 1954, No. 12, 6-10. In Russian.

The economic loading of generator sets is determined by the incremental generation cost per unit, which is a function of the incremental fuel consumption of the boilers, the steam consumption of the turbines, the demand of the auxiliaries and the losses in the system. Each of these four quantities is discussed and simplified ways are shown for their determination with numerical examples. Once these basic figures are known the order of loading the generators can be set up in a final table with or without reference to the total system load, the latter being preferable in systems containing thermal and hydropower stations. Recommendations are made for further development of the practice of economic loading. F. BURMANN

SEREBRNIKOV, V.N., inzhener.

Curves of integrated load in power systems. Elek.sta. 27 no.11:1-3  
N° 56. (MIRA 10:1)  
(Electric power plants--Load)

SEREBRENNIKOV, V.N.

Boring bar for boring minor holes. Stan.i instr. 32 no.6:42  
Je '61. (MIRA 14:6)  
(Drilling and boring machinery)

SEREBRENNIKOV, V. N.

Mixer for obtaining atomized coolant. Stan. i instr. 33  
no. 10:40 0 '62. (MIRA 15:10)

(Metalworking lubricants)

SEREBORENNIKOV, V.N.; TROITSKAYA, D.N.

Regulator of compressed air pressure. Mashinostroitel' no.9:31  
(MIRA 16:10)  
S '63.

(Pressure regulators)

SEREBRENNIKOV, V.N., inzh.

Load distribution between electric power plants taking into account the cost of relative increments. Elek. sta. 35 no.5<sup>2</sup>  
53-55 My '64. (MIRA 17:8)

L 35560-56 EWG(j)/EWT(m)/EPF(c)/EPR/EWP(t)/EWP(b) Pr-4/Ps-4 IJP(c)/FPL  
ACCESSION NR: AP5008154 S/0286/65/000/005/0032/0032  
JD/MM/JW

AUTHORS: Voronin, G. I.; Zolotukhin, M. V.; Anosov, V. I.; Krinin, V. S.  
Serebrennikov, V. N.

TITLE: An oxygen gasifier for prolonged maintenance of liquid oxygen under pressure. Class 17, No. 168735

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 5, 1965, 32

TOPIC TAGS: liquid oxygen, pressure regulator, heat transfer

ABSTRACT: This Author Certificate presents an oxygen gasifier for prolonged preservation of liquid oxygen under pressure. It consists of a thick-walled vessel with thermal insulation and systems for gasification and for pressure regulation. To avoid overheating the liquid oxygen at the walls of the vessel and to bring about premature evaporation, thermal bridges with low thermal resistance are placed in the inner cavity (see Fig. 1 on the Enclosure). Orig. art. has: 1 figure.

ASSOCIATION: none  
SUBMITTED: 18 May 63  
NO REF SOV: 000

ENCL: 01  
OTHER: 000

SUB CODE: IC,FP,TD

Card 1/2

UZHANS'KYY, Ya.H., professor, zaviduvach; SEREBRENNIKOV, V.S., dotsent, dyrektor.

Experimental observations of the contracting ability of the lungs. Medych.  
zhur. 21 no.4:70-74 '51. (MLRA 6:10)

1. Kafedra patologichnoyi fiziologiyi Sverdlovs'koho medychnoho instytutu  
(for Uzhans'kyy). 2. Sverdlovs'kyy medychnyy institut (for Serebrennykov).  
(Lungs)

SEREBORENNIKOV, V. S.

Director, Sverdlovsk state medical institute

"Gertsen's operation and its modification in congenital cerebral hernia," by A. F. Zverev, Vest. khir. 72 no. 4 Jl-Ag 1922.

SEREBRENNIKOV, V. S.

3696. SEREBRENNIKOV, V. S. Alkogolizm vredneyshniy perezhitok proshlogo. Sverdlovsk, kn. izd., 1954. 24s. 20 sm. 15.000 ekz. '25k. - (54.57333)p. 613.81 + 392

SO: Knizhnaya Letopis', Vol. 3, 1955

Name: SEREBORENNIKOV, Valentin Sergeyevich

Dissertation: Sanitary questions of development, planning, and organization of the principal industrial centers of Sverdlovskaya Oblast

Degree: Doc Med Sci

Affiliation: Sverdlovsk State Med Inst

Defense Date, Place: 18 Jun 56, Council of Leningrad Sanitary Hygiene  
Med Inst

Certification Date: 4 May 57

Source: BINO 15/57

SEREBRENNIKOV, V.S., dots. (Sverdlovsk, 14, Bankovskiy per., d.10, kv.56)

Distribution of lung cancer in Sverdlovsk and Sverdlovsk Province  
[with summary in English]. Vop.onk. 3 no.4:486-491 '57. (MIRA 10:11)

1. Iz kafedry kommunal'noy gigiyeny (zav. - dots. V.S.Serebren-  
nikov) Sverdlovskogo gosudarstvennogo meditsinskogo instituta (dir. -  
prof. A.F.Zverev)

(LUNG NEOPLASMS, statistics  
in Russia (Rus))

SEREBRENNIKOV, V.S., prof.

Development of the science of hygiene and sanitary practice. Gig.  
i san. 23 no.9:3-8 S'58 (MIRA 11:11)

1. Iz kafedry kommunal'noy gigiyeny Sverdlovskogo meditsinskogo  
instituta.  
(HYGIENE,  
in Russia (Rus))

*SERBRENNIKOV, U.S.*

21(4) PLATE I BOOK EXPLOITATION 80V/273

International Conference on the Peaceful Uses of Atomic Energy. 2nd, Geneva, 1958  
Bibliotek i sovetskikh uchenykh; Izdaniye gosudarstvennoi reaktornoy metallo-  
(Reports of Soviet Scientists; Nuclear Fuel and Reactor Metals), Moscow,  
Atomizdat, 1959. 670 p. (Series: It's: Study, vol. 2, 6,000 copies  
printed.)

Ed. (Title page): A.A. Bochvar, Academician, A.P. Vinogradov, Academician,  
A.P. Zarivov, Corresponding Member, USSR Academy of Sciences, and  
V.D. Yemel'yanov, Doctor of Technical Sciences; Tech. Ed.: E.I. Mazzell.

PURPOSE: This volume is intended for scientists, engineers, physicians, and  
biologists working in the production and peaceful application of atomic  
energy for purposes and education where the subject is taught; and for people  
interested in atomic science and technology.

CONTENTS: This is volume 3 of a complete set of reports on atomic energy,  
presented by Soviet scientists at the Second International Conference on  
the Peaceful Uses of Atomic Energy, held in Geneva from September 1 to 15, 1958.  
Volume 3 consists of two parts. The first part, edited by A.I. Gol'dobin, is  
devoted to geology, prospecting, concentration, and processing of nuclear  
source material. The second part, edited by G.I. Tsvet, includes 27 reports  
on metallurgy, metallography, processing technology of nuclear fuels and  
reactor metals, and neutron irradiation effects on metals. The titles of the  
individual papers in most cases correspond word for word with those in the  
official English language edition on the Conference proceedings. See  
80V/261 for the titles of the other volumes of the set.

Gol'dobin, A.I., O.A. Tsvetkov, G.D. Gladkikh, L.V. Mil'mitov, V.A. Polikarpov,  
and N.F. Sazanovich. Paragenetic Associations of Hydrothermal Uranium Minerals  
- in Uranium Deposits of the Soviet Union (Report No. 2201)  
Same Responsibility as Underground Works (Report  
No. 2199)

New Data on Uranium Minerals in the USSR (Report No. 2606)

Gol'manov, A.G., M.Y. Kucherenko, A.I. Nittono, M.M. Shabalin, M.M.  
Sokol'skii, S.I. Sluzh, and G.L. Tsvet. Some Theoretical and Methodical  
Problems of Radiometric Prospecting and Survey (Report No. 2505)

Bulakhovich, Yu.B. The Gamma-ray Radiation Method for Classifying  
Minerals in Radiotoxicity (Report No. 2205)

Korsh, N.N., and N.N. Skorichkin. Some Problems of Radiometric Uranium  
Ore Concentration (Report No. 2601)

Card 4/11

227

3(8)

AUTHORS: Germanov, A. I., Volkov, G. A.;  
Lisitsin, A. K., Serebrennikov, V. S.

SOV/7-59-3-7/13

TITLE: Results from Investigating the Oxidation-reduction Potential  
of Subterranean Waters (Opyt izucheniya okislitel'no-  
vosstanovitel'nogo potentsiala podzemnykh vod)

PERIODICAL: Geokhimiya, 1959, Nr 3, pp 259-265 (USSR)

ABSTRACT: During the period from 1951 to 1957 the oxidation-reduction potential was determined more than 300 times of subterranean waters from (Soviet) Central Asia, Kazakhstan and the Caucasus. Determination was carried out by means of LP-4-, LP-5-, and P-6-type potentiometers of the "MOSKIP" plant. Samples were in most cases taken from bore-holes and more rarely from springs, and only for purposes of comparison from water-courses on the surface. Certain precautionary measures were taken when taking samples (Fig. 1) in order to eliminate the influence exercised by the oxygen of the air. Besides the oxidation-reduction potential, also pH and temperature were measured, a chemical analysis was carried out, and the gas content was investigated (Table). The oxidation-reduction potential is between +550 and -480 millivolt referred to the normal hydrogen

Card 1/2

An Attempt at Investigating the Oxidation-reduction Potential of Subterranean Waters      SOV/7-59-3-7/13

electrode; in oxygen-containing waters it is + 300, in hydrocarbonaceous waters it is between -30 and -480 mv. The highest value of + 550 mv was found in water containing oxygen of pH 2. Water containing oxygen is found in depths of up to about 1000 m; the biochemical oxidation of organic substance may be found in even greater depths. There are 3 figures and 1 table.

ASSOCIATION: Institut geologii rудnykh mestorozhdeniy, petrografii, mineralogii i geokhimii AN SSSR, Moskva (Institute for the Geology of Ore Deposits, Petrography, Mineralogy, and Geochemistry, AS USSR Moscow)

SUBMITTED: July 18, 1958

Card 2/2

34482  
S/020/62/142/004/019/022  
B101/B110

26. 25/3 (also 120P)  
AUTHORS: Frumkin, A. N., Academician, Boguslavskiy, L. I., and  
Serebrennikov, V. S.

TITLE: Electrodic behavior of thermally treated polyacrylonitrile

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 142, no. 4, 1962, 878 - 880

TEXT: The electrodic properties of some hundred 2 - 3 $\mu$  thick filaments were compared with those of carbon obtained by carbonization of viscose. The potential as a function of log I was measured. An Hg<sub>2</sub>Cl<sub>2</sub> electrode was used as reference electrode in alkaline solution, a normal sulfate electrode in acid solution. Results: in 1 N H<sub>2</sub>SO<sub>4</sub> and H<sub>2</sub> atmosphere, the activity of PAN was much lower than that of carbon. In air, the activity of PAN in 1 N H<sub>2</sub>SO<sub>4</sub> and 1 N NaOH was the same as that of carbon. All processes took an unsteady course on the polymer: potential and polarization increased at constant current. This nonstationary state could not be eliminated even by means of a rotary electrode. It is explained by

Card 1/3

S/020/62/142/004/019/022  
B101/B110

Electrode behavior of thermally...

oxygen impoverishment of the solution in the micropores. It is assumed that the oxygen bound at first in the form of unstable peroxides is gradually bound irreversibly and more strongly. In oxygen atmosphere in 1 N NaOH, potentials of +280 to +285 v were observed, which were only 25 - 30 mv lower than the reversible potential of H<sub>2</sub>O formation. A continuously changing activation energy  $\Delta E$  of the conductivity was observed on filaments. It resulted therefrom that the potential in 1 N NaOH in the presence of air depended on  $\Delta E$ . In spite of a strong spread of measured values, a minimum (0.04 v) was observed for  $\Delta E \sim 0.32$  v and a maximum (0.14 v) for  $\Delta E \sim 0.44$  v. This difference of about 100 mv corresponds to a change of the reaction rate by three orders of magnitude. The maximum catalytic activity may be connected with the specificity of organic catalysts in biosynthesis.  $\Delta E$  was determined at the Institut poluprovodnikov AN SSSR (Institute of Semiconductors of the AS USSR) in the laboratory of L. S. Stil'bans, from the dependence of conductivity on  $1/T$ . Papers by A. V. Topchiyev, M. A. Geyderikh et al. (DAN, 128, 312 (1959)) and O. V. Krylov, S. Z. Roginsky (DAN, 118, 523 (1958)) are mentioned. There are 4 figures and 5 references; 4 Soviet and 1 non-Soviet. The reference to the English-language publication reads as follows: J. O'M. Bockris, A. K. Shamshul Huq, Proc. Roy. Soc., A237, 277 (1956).

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Electrodic behavior of thermally...

S/020/62/142/004/019/022  
B101/B110

ASSOCIATION: Institut elektrokhimii Akademii nauk SSSR (Institute of  
Electrochemistry of the Academy of Sciences USSR). Institut  
neftekhimicheskogo sinteza Akademii nauk SSSR (Institute of  
Petrochemical Synthesis of the Academy of Sciences USSR)

SUBMITTED: October 31, 1961

✓

Card 3/3

GRECHUSHNIKOV, A.I.; SEREBRENICKOV, V.S.

Effect of  $\gamma$ -irradiation of tubers on the carbohydrate and  
protein metabolism in potato plants. Biokhim.pl.i ovoshch.  
no.7:51-59 '62. (MIRA 16:1)

1. Nauchno-issledovatel'skiy institut kartofel'nogo khozyaystva.  
(Potatoes) (Plants—Metabolism)  
(Gamma rays—Physiological effect)

GRECHUSHNIKOV, A.I.; KIRYUKHIN, V.P.; SEREBRENIKOV, V.S.; TEKTONIDI, I.P.

Some physiological and biochemical changes in potatoes produced  
by treating the tubers with gibberellin. Fiziol. rast. 11 no.4:  
620-629 J1-Ag '64. (MIRA 17:11)

1. Nauchno-issledovatel'skiy institut kartofel'nogo khozyaystva,  
Malakhovka Moskovskoy oblasti.

SEPERENNIKOV, V.S.; KIRYUKHIN, V.P.

Effect of the irradiation of tubers by cobalt 60 gamma rays  
before planting on the productivity of potato plants. Dokl.

Akad. sel'khoz. nauk no.10:7-11 O '65.

(MIRA 18:12)

1. Nauchno-issledovatel'skiy institut kartofel'nogo  
khozyaystva.

SEREBORENNIKOV, V.V., kand. veterinarnykh nauk

Surgical treatment of cows in traumatic reticulitis. Veterinariia 36  
no.9:43-45 S '59. (MIRA 12:12)

1.Troitskiy veterinarnyy institut.  
(Veterinary surgery)

SEREBRENNICKOV, Veniamin Vasil'yevich; BYKOV, Viktor Vasil'yevich; NOVIK, A.  
redaktor; MATUSEVICH, S., tekhnicheskij redaktor

[Mine drainage control] Upravlenie prokhodcheskim vodootlivom.  
Kiev, Gos.izd-vo tekhn. lit-ry USSR, 1957. 34 p. (MLRA 10:9)  
(Mine pumps)

ZELINSKIY, V.M., kand.tekhn.nauk; SEREBRENNIKOV, V.V., inzh.; BYKOV, V.V.,  
inzh.

Equipment for automatic control of mine pumps. Shakht. stroi.  
no.5:17-21 '58. (MIRA 11:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut organizatsii i  
mekhanizatsii shakhtnogo stroitel'stva.  
(Mine pumps) (Automatic control)

SEREBRENNIKOV, V.V., inzh.; BYKOV, V.V., inzh.

New automatic water-drainage apparatus. Shakht. stroi. 5  
no. 3:22-24 Mr '61. (MIRA 14:2)

1. Ukrainskiy nauchno-issledovatel'skiy institut organizatsii  
i mekhanizatsii shakhtnogo stroitel'stva.  
(Mine pumps) (Automatic control)

SEREBRENNIKOV, V.V. (Khar'kov); BYKOV, V.V. (Khar'kov)

Level relay for automating pumping units. Vod. i san. tekhn.  
no.10:10.11 0 '61. (MIRA 14:11)  
(Pumping machinery)

KAMAYEVA, I.G.; SEREBRENNIKOV, V.V.

Solubility isotherm of the system  $ZrOCl_2 - CaCl_2 - HCl - H_2O$   
at  $25^\circ$ . Zhur.neorg.khim. 8 no.9:2151-2154 S '63. (MIRA 16:10)

SEREBORENNIKOV, Veniamin Vasil'yevich; RUKMAN, Gidaliy L'vovich;  
BYKOV, Viktor Vasil'yevich; MOSIYCHUK, Konstantin Aleksandrovich;  
SHOROKHOVA, A.V., red.izd-va; LOMILINA, L.N., tekhn.red.

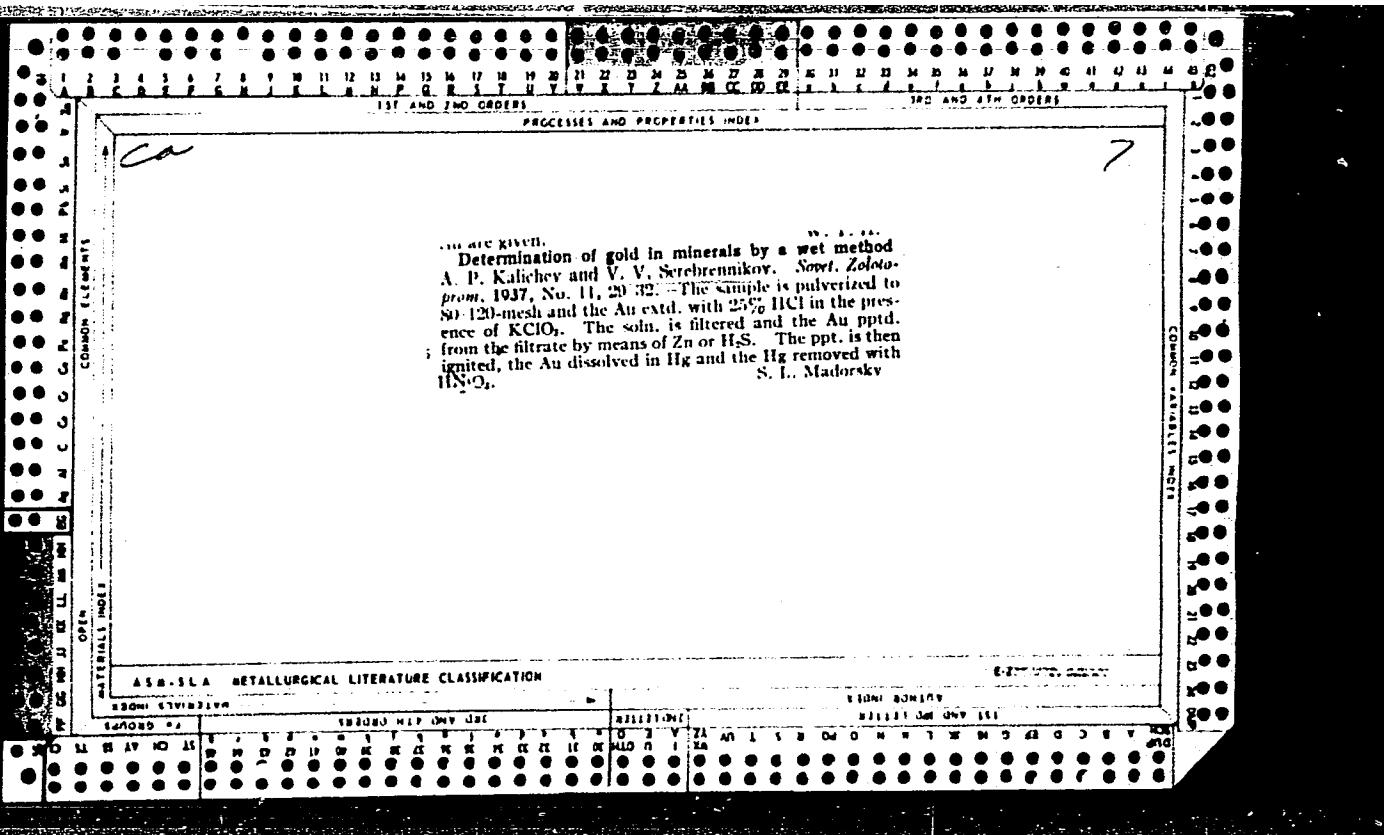
[Mine electrician's handbook] Spravochnik shakhtnogo elektro-slesaria. By V.V. Serebrennikov i dr. Moskva, Gos.nauchno-tekhn. izd-vo lit-ry po gornym delu, 1961. 383 p.

(MIRA 15:2)

(Electricity in mining)

SEREBRENNIKOV, Veniamin Vasil'yevich; BYKOV, Viktor Vasil'yevich;  
RUKMAN, Gidaliy L'vovich; VOLOBUYEV, S.Kh., inzh.,  
retsenzent; LYAKHNOVICH, P.D., inzh., retsenzent;  
MARKOV, A.A., inzh., retsenzent;

[Drainage during the construction and reorganization of  
mines] Vodootliv pri stroitel'stve i rekonstruktsii  
shakht. Moskva, Izd-vo "Nedra," 1964. 144 p.  
(MIRA 17:6)



CA

7

Precipitation of rare earths with ammonia and oxalic acid in the complete quantitative analysis of minerals. V. V. Serebrenikov. *Voprosy Zapiski Tomsk. Gosudarst. Univ. im. N. I. Katschinskogo* 1948, No. 8, 111-23. In the presence of NH<sub>4</sub> salts there may occur incomplete pptn. of rare earths by NH<sub>4</sub>OH along with Fe and Al during the sepn. from Ca and Mg. The rare earth analysis should be done by the fluoride method if much Fe and Al are present, since the oxalate method gives low results. A recommended alternative is: Ppt. the test soln. with 10% NH<sub>4</sub>OH with 2-5 ml. in excess, heat to coagulation, filter, wash with ammoniacal 2% NH<sub>4</sub>NO<sub>3</sub>. Ash in Pt vessel and evap. with HF; after treatment with H<sub>2</sub>O contg. a little HF filter the soln., ash the ppt. and decompose with H<sub>2</sub>SO<sub>4</sub> to SO<sub>2</sub> fumes; dissolve the residue, dil. with HCl, then add NH<sub>4</sub>OH to ppt. the hydroxides and boil with 40-50 ml. of satd. oxalic acid soln. until clear of the hydroxide ppt. Filter off the rare earth oxalates and wash with H<sub>2</sub>O contg. oxalic acid. Dissolve and re-ppt. from HNO<sub>3</sub> soln. G. M. Kosolapoff

SEREBOV IKOV, V. V.

Serebov'ikov, V. V. and Karpov, A. N. "The ferrocyanide ratio in sequential analysis of zinc and cadmium in calcium electrolytes", Uchen. Zapiski (Tov'skiy gos. un-t i Kuybysheva), no. 11, 1948, p. 137-43.

See: U-3261, 10 April 53, (Letopis 'Zhurnal 'nykh Statey, no. 12, 1949).

U S S R .

SEREBRENNIKOV, V.V.  
Complex formation by rare earths. Some characteristics  
of complex formation by quadrivalent cerium. V. V.

Serebrennikov. Soobshcheniya o Nauch. Rabot. Vsesoyuzn.

Khim. Osnoshchescia im. Mendeleyeva 1953, No. 1, 60-8.

Referat. Zhur. Khim. 1954, No. 19721.—As the ionic  
radius of the members of the rare earth group decreases,  
the tendency to form complexes increases. Oxidation of  
 $Ce^{+++}$  to  $Ce^{++++}$  increases the ability to form complexes.  
This tendency manifests itself also in the formation of  
heteropoly compds. Such a compd. is  $(NH_4)_4[Ce(W_2O_11)_{2-x}H_2O]$ .  
Trivalent rare earths form simple compds. Another  
difference is the formation of ceriumic acid,  $H_3[Ce(NO_3)_6]$   
readily extractable with  $Bu_2O$ , whereas the trivalent rare  
earths form double nitrates. Conductometric titration  
established the formation of Na diprophosphate cerlate  
 $Na_4[Ce(P_2O_7)_2]$ .

M.Hosch

SEREBRENNIKOV, V. V.

USSR/Physical Chemistry, Thermodynamics, Thermochemistry, E-8  
Equilibria, Physical-Chemical Analysis, Phase Transitions.

Abs Jour: Ref Zhur-Khimiya, No 5, 1957, 14629

Author : V. V. Serebrennikov, I. A. Serebrennikova

Inst : Tomsk University

Title : Some Thermochemical Peculiarities of Actinides

Orig Pub: Uch. zap. Tomsk. un-ta, 1955, № 26, 9-15

Abstract: The character of fluctuations of the heat of formation  $\Delta H_{298}^{\circ}$  of halides was compared with that of lanthanides (I) and actinides (II). The course of  $\Delta H_{298}^{\circ}$  changes for 3-valent element compounds and 3-charge ions of II is opposite to that of  $\Delta H_{298}^{\circ}$  of compounds of I and 4-valent II. The values of  $\Delta H_{298}^{\circ}$  for gaseous and hydrated ions and the hydration heat of ions, as well as the lattice energy of some I and II oxides were computed.

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SERE BRENNIKOV, V.V.

Distr: LE

Serebrennikov, V.V.: Khimiya actinidov (Chemistry of the Actinide (Actinium, Protactinium and Transuranium Elements)). Tomsk: Izdatel. Tomskogo Univ. 1956. 101 pp. r. 6, k. 30.

*JL*

SEREBRENNIKOV, V.V.; TYSHINSKAYA, I.I.; CHUPAKHINA, R.A.

Formation of complex compounds by rare earths. Trudy TGU  
145:161-162 '57.  
(MIRA 12:3)

1.Kafedra neorganicheskoy khimii Tomskogo gosudarstvennogo uni-  
versiteta imeni V.V. Kuybysheva.  
(Rare earth compounds)

SOV/137-58-10-20345

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 10, p 1 (USSR)

AUTHOR: Serebrennikov, V. V.

TITLE: Successes of Soviet Chemists in the Study of the Rare-earth Elements (Dostizheniya sovetskikh khimikov po izucheniyu redkozemel'nykh elementov)

PERIODICAL: Dokl. 7-y Nauchn. konferentsii, posvyashch. 40-letiyu Velikoy Oktyabr'sk. sots. revolyutsii. Nr 2. Tomsk, Tomskiy un-t, 1957, pp 133-135

ABSTRACT: Scientific workers occupied with problems of the metallurgy, metallography, and applications of the rare-earth metals are listed. The problems on which they are working are noted.

1. Rare earth elements--USSR      2. Scientific research      P. N.

Card 1/1

SOV/137-58-11-22216

Translation from: Referativnyy zhurnal. Metallurgiya, 1958, Nr 11, p 54 (USSR)

AUTHORS: Chupakhina, R. A., Skorik, N. A., Serebrennikov, V. V.

TITLE: Separation of Rare-earth Elements Into Ion-exchange Resins by Means of the Complex Compounds of Sodium Versenate and the Heavy Metals (Razdeleniye redkozemel'nykh elementov na ionoobmennyykh smolakh s pomoshch'yu kompleksnykh soyedineniy trilona "B" i tyazhelykh metallov)

PERIODICAL: Dokl. 7-y Nauchn. konferentsii, posvyashch. 40-letiyu Velikoy Oktyabr'skoy sots. revolyutsii, Nr 2, Tomsk, Tomskiy un-ta, 1957, pp 169-170

ABSTRACT: A study is made of the possibility of separating  $\text{La}^{3+}$ ,  $\text{Pr}^{3+}$ , and  $\text{Nd}^{3+}$ , adsorbed on the ammonia form of the cation exchanger KU-2, by eluting solutions of complex acids of  $\text{Mg}^{2+}$ ,  $\text{Zn}^{2+}$ ,  $\text{Cd}^{2+}$ , and  $\text{Hg}^{2+}$  with H<sub>4</sub> Enta. Experiments showed the pH of these complexes to provide no accurate and precise answer, for practical purposes, to the question of the processes whereby cation exchanger KU-2 separates the rare-earth elements. It is established that a solution of an Mg<sup>2+</sup> acid with H<sub>4</sub> Enta washes out all 3 elements. An 0.5%

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SOV/137-58-11-22216

Separation of Rare-earth Elements Into Ion-exchange Resins (cont.)

solution of Zn complex does not wash out La<sup>3+</sup> at pH 2.92-4.62, but does wash out Pr and Nd at pH 4.62. A 1% solution of the Zn complex does separate these elements. Solutions of Cd<sup>2+</sup> and Hg<sup>2+</sup> complexes with H<sub>4</sub> Entha at 4.0-4.1 pH washes out La in addition to Pr and Nd. A 1% solution of Cd complex separates Pr and Nd, but less effectively than does a Zn complex. A solution of the Hg complex appreciably elutes a mixture of Pr and Nd when the pH of the solution is reduced to 3.1.

L. P.

Card 2/2